

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1-20 are pending in this application. Claims 1, 2, 11, and 12 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. patent 5,943,141 to Tamura in view of U.S. patent 5,442,464 to Ito and U.S. patent 5,111,311 to Yamamoto. Claims 3, 4, 13, and 14 were rejected under 35 U.S.C. §103(a) as unpatentable over Tamura in view of Ito, Yamamoto, and U.S. patent 5,659,335 to Barron et al. (herein “Barron”). Claims 9, 10, 19, and 20 were rejected under 35 U.S.C. §103(a) as unpatentable over Tamura in view of Ito, Yamamoto, and U.S. patent 5,900,948 to Shigeeda et al. (herein “Shigeeda”). Claims 5-8 and 15-18 were objected to as dependent upon rejected base claims, but were noted as allowable if rewritten in independent form to include all of the limitations of their base claims and any intervening claims.

Initially, applicants gratefully acknowledge the indication of the allowable subject matter in claims 5-8 and 15-18.

Addressing now each of the above-noted prior art rejections, those rejections are traversed by the present response.

The claims are amended by the present response to clarify features recited therein. Specifically, the claims now indicate further features of the “reference voltage varying” part or means, and specifically indicate that element operates to provide a reference voltage to an A-D converter:

to vary between first, second, and third reference voltages based on a current mode of an image scanner, the first reference voltage selected for a background removal function, and one of the second and third reference voltages being selected when the background removal function is not used.

That subject matter is fully supported in the original specification for example at page 18, line 25 to page 19, line 25. As discussed in that portion of the present specification, three types of

voltages can be utilized as a reference voltage for the A-D converters 14. Those voltages are selected based on a current mode of an image scanner, and are based on whether a background removal function is used or not. Such features clarified in the claims are believed to clearly distinguish over the applied art.

The outstanding rejection relies upon Tamura to disclose an A-D converter in Figure 1, element 5, and as noted at column 5, lines 1-2, and the outstanding rejection also indicates that same A-D converter and the disclosure in Tamura at column 5, lines 2-7 discloses a reference voltage varying part. The outstanding rejection specifically states, with respect to a second part of the A-D converter:

The second part performs the varying of the reference voltage so that the highest reference voltage corresponds to the white reference data and the lowest reference voltage corresponds to the black reference data (column 5, lines 2-7 of Tamura).¹

In response to that basis for the rejection, applicants respectfully submit Tamura does not disclose or suggest that the A-D converter 5 performs any function of varying a reference voltage input thereto between first, second, and third voltages based on a current mode of an image scanner. At column 5, lines 2-7 Tamura does not provide any such indication. Further, the claims also clarify that the voltages are selected based on a background removal function, which is also neither taught nor suggested by Tamura.

In such ways, the claims are believed to clearly distinguish over the teachings in Tamura, which were relied upon for the above-noted claim features. Moreover, no teachings in the further cited references were cited with respect to the “reference voltage varying” part or means, nor any disclosures in the further cited references believed to cure the above-noted deficiencies of Tamura.

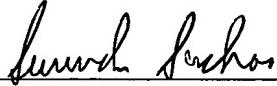
In view of these foregoing comments, applicants respectfully submit the claims as currently written distinguish over the applied art.

¹ Office Action of September 21, 2005, the paragraph bridging pages 2 and 3.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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